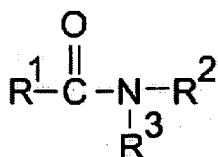


What is claimed is:

1. A dispersant composition comprising a reaction product of (1) an acrylamide and (2) a compound having at least one primary or secondary amine group and being selected from the group consisting of hydrocarbyl-substituted succinimides, hydrocarbyl-substituted amines, and Mannich base adducts derived from hydrocarbyl-substituted phenols condensed with aldehydes and amines, wherein the hydrocarbyl substituent has a number average molecular weight ranging from about 500 to about 5000 as determined by gel permeation chromatography.

2. The dispersant composition of claim 1, wherein the acrylamide is comprised of a compound of the formula:



where R<sup>1</sup> is selected from an α,β-unsaturated linear or branched alkylene group, and R<sup>2</sup> and R<sup>3</sup> are independently selected from H, a linear or branched alkyl or alkenyl group, an aryl group, a cycloalkyl group, an aralkyl group, an alkyaryl group, an alkyl amine group, and an aryl amine group, provided that at least one of R<sup>2</sup> and R<sup>3</sup> contain a titratable nitrogen.

3. The dispersant composition of claim 1 wherein the compound comprises a hydrocarbyl-substituted succinimide derived from a polyalkylene group and succinic acid having a ratio of succinic acid or anhydride to olefin ranging from about 0.5:1.0 to about 5:1.

4. The dispersant composition of claim 1 wherein the compound comprises a Mannich adduct derived from hydrocarbyl-substituted phenols, formaldehydes and polyethylene polyamines.

5. The dispersant composition of claim 1 wherein the compound comprises a polyalkylene polyamine.

6. The dispersant composition of claim 1 further comprising a nitrogen containing viscosity index improver selected from the group consisting of N-vinyl imidazole, 1-vinyl-2-pyrrolidinone, N-allyl imidazole, allyl amines, 1-vinyl pyrrolidone, 2-vinyl pyridine, 4-vinyl pyridine, N-methyl-N-vinyl acetamide, diallyl formamide, N-methyl-N-allyl formamide, N-ethyl-N-allyl formamide, N-cyclohexyl-N-allyl formamide, 4-methyl-5-vinyl thiazole, N-allyl di-iso-octyl phenothiazine, 2-methyl-1-vinylimidazole, 3-methyl-1-vinylpyrazole, N-vinyl purine, N-vinyl piperazines, N-vinyl succinimide, vinylpiperidines, vinylmorpholines, N-arylphenylenediamines, and mixtures thereof.

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7. The dispersant composition of claim 6 further comprising a non-dispersant viscosity index improver selected from the group consisting of olefin copolymers, polyalkylmethacrylates, and styrene-maleic esters.

15

8. The dispersant composition of claim 1 further comprising a non-dispersant viscosity index improver selected from the group consisting of olefin copolymers, polyalkylmethacrylates, and styrene-maleic esters.

20

9. A lubricant composition comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the lubricant composition, of the dispersant composition of claim 1.

25

10. A vehicle having moving parts and containing a lubricant for lubricating the moving parts, the lubricant comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the lubricant composition, of the dispersant composition of claim 1.

30

11. A lubricant additive comprising, a first dispersant and a second dispersant selected from the group consisting of hydrocarbyl-substituted succinimides, hydrocarbyl-substituted amines, and Mannich base adducts derived from hydrocarbyl-substituted phenols condensed with aldehydes and amines, wherein the first dispersant is the dispersant composition of claim 1.

12. The lubricant additive of claim 11 further comprising a nitrogen containing viscosity index improver selected from the group consisting of N-vinyl imidazole, 1-vinyl-2-pyrrolidinone, N-allyl imidazole, allyl amines, 1-vinyl pyrrolidone, 2-vinyl pyridine, 4-vinyl pyridine, N-methyl-N-vinyl acetamide, diallyl formamide, N-methyl-N-allyl formamide, N-ethyl-N-allyl formamide, N-cyclohexyl-N-allyl formamide, 4-methyl-5-vinyl thiazole, N-allyl di-iso-octyl phenothiazine, 2-methyl-1-vinylimidazole, 3-methyl-1-vinylpyrazole, N-vinyl purine, N-vinyl piperazines, N-vinyl succinimide, vinylpiperidines, vinylmorpholines, N-arylphenylenediamines, and mixtures thereof.

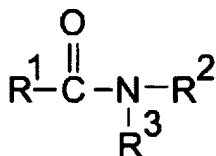
13. The lubricant additive of claim 12 further comprising a non-dispersant viscosity index improver selected from the group consisting of olefin copolymers, polyalkylmethacrylates, and styrene-maleic esters.

14. The lubricant additive of claim 11 further comprising a non-dispersant viscosity index improver selected from the group consisting of olefin copolymers, polyalkylmethacrylates, and styrene-maleic esters.

15. A lubricant composition comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the lubricant composition, of the lubricant additive of claim 11.

16. A lubricant additive comprising a reaction product of (1) an acrylamide and (2) a dispersant having at least one primary or secondary amine group and being selected from the group consisting of hydrocarbyl-substituted succinimides, hydrocarbyl-substituted amines, and Mannich base adducts derived from hydrocarbyl-substituted phenols condensed with aldehydes and amines, wherein the hydrocarbyl substituent has a number average molecular weight ranging from about 500 to about 5000 as determined by gel permeation chromatography.

17. The lubricant additive of claim 16, wherein the acrylamide is comprised of a compound of the formula:



where R<sup>1</sup> is selected from an α,β-unsaturated linear or branched alkylene group, and R<sup>2</sup> and R<sup>3</sup> are independently selected from H, a linear or branched alkyl or alkenyl group, an aryl group, a cycloalkyl group, an aralkyl group, an alkyaryl group, an alkyl  
 5 amine group, and an aryl amine group, provided that at least one of R<sup>2</sup> and R<sup>3</sup> contain a titratable nitrogen.

18. The lubricant additive of claim 16 wherein the dispersant comprises a hydrocarbyl-substituted succinimide derived from a polyalkylene group and succinic  
 10 acid having a ratio of polyalkylene group to succinic acid ranging from about 0.8:1.0 to about 3:1.

19. The lubricant additive of claim 16 wherein the dispersant comprises a Mannich adduct derived from hydrocarbyl-substituted phenols, formaldehydes and  
 15 polyethylene polyamines.

20. The lubricant additive of claim 16 wherein the dispersant comprises a polyalkylene polyamine.

20 21. The lubricant additive of claim 16 further comprising a nitrogen containing viscosity index improver selected from the group consisting of N-vinyl imidazole, 1-vinyl-2-pyrrolidinone, N-allyl imidazole, allyl amines, 1-vinyl pyrrolidone, 2-vinyl pyridine, 4-vinyl pyridine, N-methyl-N-vinyl acetamide, diallyl formamide, N-methyl-N-allyl formamide, N-ethyl-N-allyl formamide, N-cyclohexyl-  
 25 N-allyl formamide, 4-methyl-5-vinyl thiazole, N-allyl di-iso-octyl phenothiazine, 2-methyl-1-vinylimidazole, 3-methyl-1-vinylpyrazole, N-vinyl purine, N-vinyl piperazines, N-vinyl succinimide, vinylpiperidines, vinylmorpholines, N-arylphenylenediamines, and mixtures thereof.

22. The lubricant additive of claim 16 further comprising a non-dispersant viscosity index improver selected from the group consisting of olefin copolymers, polyalkylmethacrylates, and styrene-maleic esters.

5           23. A lubricant composition comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the lubricant composition, of the lubricant additive of claim 16.

10           24. A method of lubricating moving parts of a vehicle containing one or more moving parts, the method comprising contacting a lubricating oil with the one or more moving parts of the vehicle, said oil comprising a lubricant composition containing a lubricant and a lubricant additive, the lubricant additive including a reaction product of (1) an acrylamide and (2) a dispersant having at least one primary or secondary amine group and being selected from the group consisting of hydrocarbyl-substituted succinimides, hydrocarbyl-substituted amines, and Mannich base adducts derived from hydrocarbyl-substituted phenols condensed with aldehydes and amines, wherein the hydrocarbyl substituent has a number average molecular weight ranging from about 500 to about 5000 as determined by gel permeation chromatography, and wherein the lubricant additive is present in the lubricant composition in an amount  
15           sufficient to lubricate the one or more moving parts of the vehicle.  
20

25           25. The method of claim 24 wherein the vehicle includes an internal combustion engine having a crankcase and wherein the lubricant composition comprises a crankcase oil present in the crankcase of the vehicle.

26. The method of claim 24 wherein the lubricant composition comprises a drive train lubricant present in an automotive drive train of the vehicle.

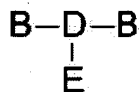
30           27. The method of claim 24 wherein the lubricant additive includes a nitrogen containing viscosity index improver selected from the group consisting of N-vinyl imidazole, 1-vinyl-2-pyrrolidinone, N-allyl imidazole, allyl amines, 1-vinyl pyrrolidone, 2-vinyl pyridine, 4-vinyl pyridine, N-methyl-N-vinyl acetamide, diallyl formamide, N-methyl-N-allyl formamide, N-ethyl-N-allyl formamide, N-cyclohexyl-N-allyl formamide, 4-methyl-5-vinyl thiazole, N-allyl di-iso-octyl phenothiazine, 2-

methyl-1-vinylimidazole, 3-methyl-1-vinylpyrazole, N-vinyl purine, N-vinyl piperazines, N-vinyl succinimide, vinylpiperidines, vinylmorpholines, N-arylphenylenediamines, and mixtures thereof.

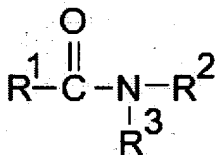
28. The method of claim 27 further comprising a non-dispersant viscosity index improver selected from the group consisting of olefin copolymers, polyalkylmethacrylates, and styrene-maleic esters.

29. The method of claim 24 further comprising a non-dispersant viscosity  
10 index improver selected from the group consisting of olefin copolymers,  
polyalkylmethacrylates, and styrene-maleic esters.

30. A composition for use as a dispersant comprising a compound of the formula:

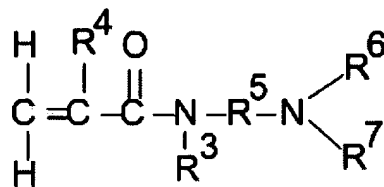


where B is selected from a hydrocarbyl-substituted succinic acid group, a reaction product of an alkyl phenol and an aldehyde, and a polyalkylene group, D is selected from an amine and a polyamine, and E is a group derived from a compound of the formula:



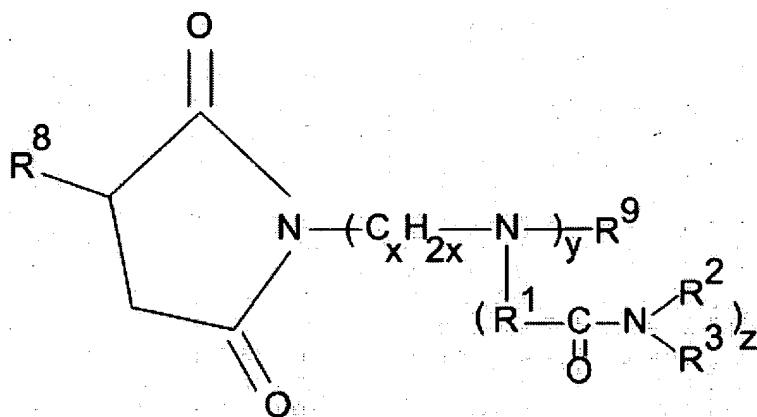
where R<sup>1</sup> is selected from an  $\alpha,\beta$ -unsaturated linear or branched alkylene group, and R<sup>2</sup> and R<sup>3</sup> are independently selected from H, a linear or branched alkyl or alkenyl group, an aryl group, a cycloalkyl group, an aralkyl group, an alkyaryl group, an alkyl amine group, and an aryl amine group, provided that at least one of R<sup>2</sup> and R<sup>3</sup> contain a titratable nitrogen.

31. The composition of claim 30 wherein E is a group derived from a compound of the formula:

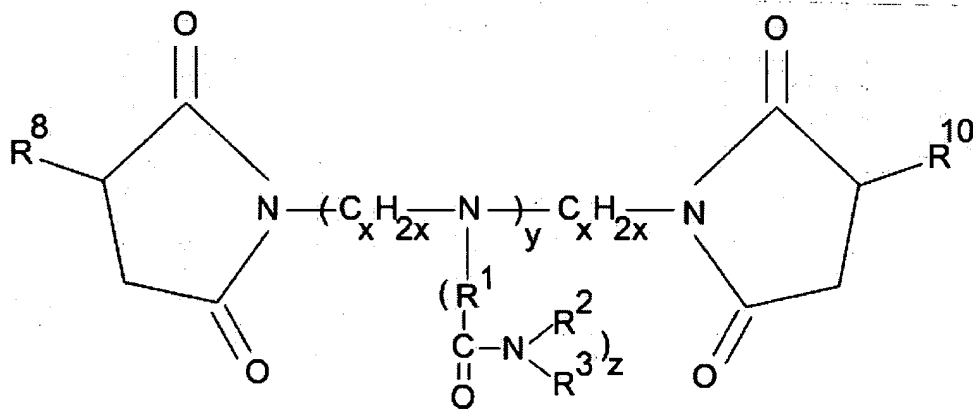


where  $\text{R}^4$  is selected from H, and an alkyl group containing from 1 to 4 carbon atoms,  $\text{R}^3$  is selected from H, a linear or branched alkyl or alkenyl group, and an aryl group,  $\text{R}^5$  is selected from an alkylene group, an aralkylene group, a cycloalkylene group, an arylene group, and an alkarylene group, and  $\text{R}^6$  and  $\text{R}^7$  are independently selected from H, a linear or branched alkyl or alkenyl group, an aryl group, an aralkyl group, a cycloalkyl group, and an alkaryl group.

32. The composition of claim 30 wherein the compound is selected from the group consisting of:



and



where  $R^1$  is selected from an  $\alpha,\beta$ -unsaturated linear or branched alkylene group,  $R^2$  and  $R^3$  are independently selected from H, an alkyl group, an aryl group, a cycloalkyl group, an aralkyl group, an alkyaryl group, an alkyl amine group, and an aryl amine group, provided that at least one of  $R^2$  and  $R^3$  contain a titratable nitrogen,  $R^8$  and  $R^{10}$  are the same or different hydrocarbyl groups, preferably polyisobutylene groups having a number average molecular weight ranging from about 500 to about 5000 as determined by gel permeation chromatography,  $R^9$  is selected from H, a linear or branched alkyl or alkenyl group, an aryl group, an aralkyl group, a cycloalkyl group, and an alkaryl group, x is an integer ranging from about 1 to about 6, y is an integer ranging from about 1 to about 10, and z is from about 0.01y to about 1.0y.

33. The composition of claim 32 wherein  $R^8$  and  $R^{10}$  comprise polyisobutylene having a number average molecular weight ranging from about 800 to about 3000 as determined by gel permeation chromatography.